

# Nevada State Office of Energy New Energy Industry Task Force

## Overview of RTO Concepts

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PJM interconnection

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www.pjm.com



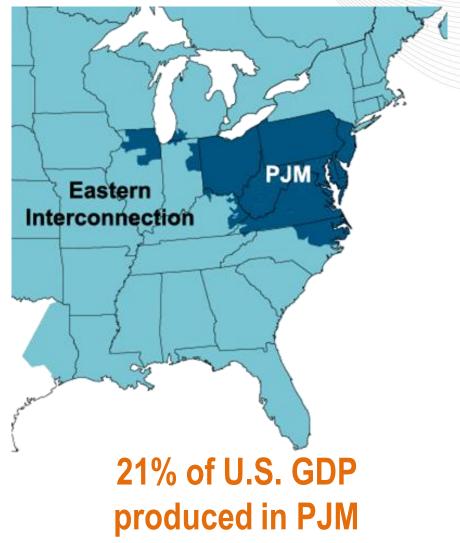


PJM: Who We Are

#### **KEY STATISTICS**

| Member companies            | 850+    |
|-----------------------------|---------|
| Millions of people served   | 60      |
| Peak load in megawatts      | 163,848 |
| MWs of generating capacity  | 185,600 |
| Miles of transmission lines | 59,750  |
| GWh of annual energy        | 832,331 |
| Generation sources          | 1,365   |
| Square miles of territory   | 214,000 |
| States served               | 13 + DC |

As of 7/2012



## PJM Focus

## Reliability

- Grid Operations
- Supply/Demand Balance
- Transmission monitoring

## **Regional Planning**

• 15-Year Outlook

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## **Market Operation**

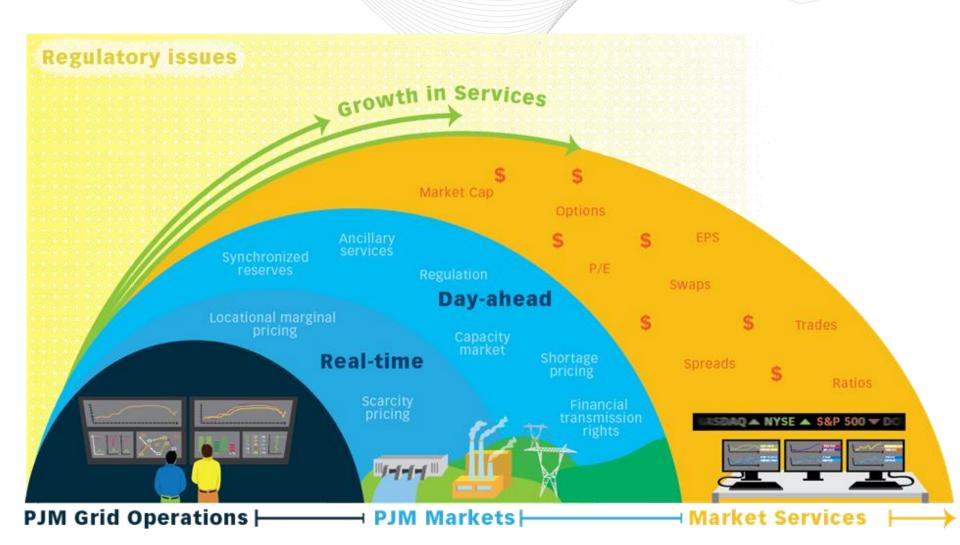
- Energy
- Capacity
- Ancillary Services

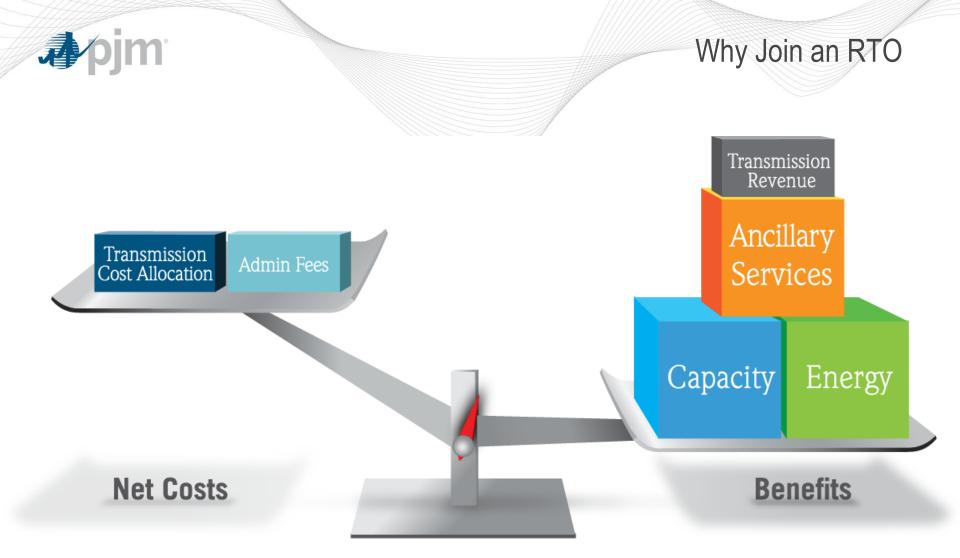
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## Markets Reinforce Reliable Operations







#### **Reliability Perspective**

- PJM and Transmission Owner coordinated
- Costs allocated depending on voltage level

#### **Generation Perspective**

- Interconnection queue
- Costs borne by individual developers

#### **Merchant Transmission Perspective**

- Interconnection queue
- Cost borne by developer
- Cost recovery by subscription

### **State Agreement Approach (proposed)**

- Transmission costs borne by sponsoring states (specify cost recovery)
- PJM scenario analyses





#### Example Merchant Projects: Linden VFT and Neptune

